**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

0/719,412

SUGITA et al.

Examiner:

Unknown

Serial No.:

10/719,412

Group Art Unit:

Unknown

Filed:

November 21, 2003

Docket No.:

10873.1333USW1

Title:

MAGNETORESISTIVE ELEMENT AND METHOD FOR PRODUCING THE SAME, AS WELL AS MAGNETIC HEAD, MAGNETIC MEMORY

AND MAGNETIC RECORDING DEVICE USING THE SAME

**CERTIFICATE UNDER 37 CFR 1.8:** 

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 9, 2004.

Name: Jennifer Holden

## **INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(b))**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted within three months of the filing date of the above-identified application, which is not an application under 37 C.F.R. § 1.53(d). Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(a)(2)(i), a copy of the U.S. patents and U.S. patent publications listed on the enclosed Form 1449 are not provided, as this application was filed after June 30, 2003. A copy of any foreign patent document or "Other Document" listed on the Form 1449 is enclosed, in accordance with 37 C.F.R. §1.98(a)(2).

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a

reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

Respectfully submitted,

MERCHANT & GOULD P.C.

P.O. Box 2903 Minneapolis, MN 55402-0903 (612) 332-5\( \beta \)00

Dated: February 9, 2004

Douglas P. Mueller

Reg. No. 30,300

DPM/jh

23552 PATENT TRADEMARK OFFICE

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DEVICE USING THE SAME

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Name: Jennifer Holder

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 23552
PATENT TRADEMARK OFFICE

Sir:

We are transmitting herewith the attached:

☐ Transmittal Sheet in duplicate containing Certificate of Mailing

Information Disclosure Statement, Form 1449, 14 References listed, 9 Non-U.S. enclosed

Return postcard

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or fredit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT & GOULD P.C. P.O. Box 2903, Minneapolis, MN 55402-0903 612.332.5300

Name: Douglas P. Mueller

Reg. No.: 30,300

DPM/jh

FORM 1449\* IN

#### INFORMATION DISCLOSURE STATEMENT

Docket Number: 10873.1333USW1

Application Number: 10/719,412

Applicant: SUGITA et al.

Filing Date: November 21,

Group Art Unit: Unknown

### IN AN APPLICATION

(Use several sheets if necessary)

RAPUSTO			· (	J.S. PATENT DOCUMEN	ITS			
EXAMINER INITIAL			DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
			11.2001	Kumagai et al.				
			12.2001	Saito et al.				
	6,169,303		01.2001	Anthony				
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			FOR	REIGN PATENT DOCUM	IENTS			
	DOCUMENT NO.		DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	2000-068569		03.2000	Japan			Abstract	
	2001-236613		08.2001	Japan			Abstract	
2000-188435		35	07.2000	Japan			Abstract	
2002-171012		06.2002	Japan			Abstract		
	γ	OTHER	DOCUMENT	S (Including Author, Title, I	Date, Pertinent F	Pages, Etc.)		
· · · · · · · · · · · · · · · · · · ·		Koichiro INOMATA, MRAM Technology Progress and Prospect" Materials Integration Vol. 13, No. 12, P13-1 2000 (Japanese only)						
	,	T.Miyazaki et al., "Giant Magnetic Tunneling Effect in Fe/Al <sub>2</sub> O <sub>3</sub> /Fe Junction", Journal of Magnetism and Magnetic Materials, 139 (1995) L231-L234						
	-	Ping Shang et al., "High-resolution electron microscopy study of tunneling junctions with AIN and AIon barriers", Journal of Applied Physics, Vol. 89, No. 11, pp. 6874-6876, 1 June 2001						
		Yasunari SUGITA et al., "Tunneling Magnetoresistance Enhancement for Pt-Added Magnetic Tunnel Ju Japanese Journal of Applied Physics, Vol. 41, No. 10A, pp. L1072-1074, October 1, 2002						
	•	Nozomu M	ATSUKAWA	et al., "Thermally stable exc ol. 81, No. 25, pp. 4784-478	change-biased m	nagnetic tunnel jun	ections over 40	0° C"

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**EXAMINER** 

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.